

### **DETAILED ACTION**

1. This in response to the amendment file February 29, 2008. Claims 1-4 and 6 have been amended; Claims 5 ha been cancelled; Claims 1-4 and 6 are pending and have been considered below.

### ***Claim Objections***

2. Claim 4 is objected to because of the following informalities: the claim recites the limitation of “anti-tampering signature system wherein display “ However, line 21 recites the limitation of anti-tampering signature apparatus provided” It is unclear to the examiner if applicant is claiming a system or an apparatus. Appropriate correction is required.

3. Claim 6 is objected to because of the following informalities: the claim has been improperly amended. Original claim 6 recited the limitation of “A computer-readable recording medium on which the anti-tampering signature program according to claim 5 is recorded”, and amended claim 6 recites the limitation of “A computer-readable recording medium on which is stored an anti-tampering signature program for causing a computer to perform a.....occurred”. Appropriate correction is required.

4. Claim 5 is objected to because of the following informalities: claim 5 recite “cancelled without prejudice” cancelled should be place in parenthesis. Appropriate correction is required.

***Response to Arguments***

5. Applicant's arguments with respect to claims 1-4 and 6 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bentley et al (US2003/0217275) in view of Yankovich et al (US 6,704,906).

***Claims 1, 3, 4 and 6:*** Bentley et al discloses an anti-tampering signature an anti-tampering signature method, apparatus, system, program and computer readable for rewritable media wherein display data displayed on rewritable medium that displays display data stored in a writeable and erasable state is certified( abstract), the method comprising the steps of:

- i. Providing a rewriteable media including an information display area wherein display data is stored in a visually viewable, rewritable and erasable state(paragraph [0068]),
- ii. Determining whether or not certifier signature information contained in said plurality of display data certifier identification areas, or to be added to one of said display data certifier identification areas, matches with

corresponding registered certifier signature information stored in, or separately added to, a registered certifier signature information database, and, in those cases wherein a match is not judged to be present, issuing a warning that signature tampering may have occurred(*paragraphs [0068], [0071]*);

iii. An extraction step of extracting a characteristic quantity *#ore* that represents a characteristic of image data generated by reading the display data according to an instruction from a certifier who has certified the display data (*This extracted information is hashed in the same manner as was used to create the signature*)(*paragraph [0071]*),

iv. Generating encrypted data by encrypting said characteristic quantity using an encryption key paired with an identifier (*the hash is encrypted using the signer's private key and the encrypted hash is then stored in the signature*) (*paragraphs [0071], [0086]*),

v. An appending step of appending the each said identifier and the its associated encrypted data to the rewritable medium in a certification data area corresponding to the certifier who issued the instruction for the extraction of the characteristic information (*the signature elements can be distinguished by appending a specially marked data linkage to them*)(*paragraphs [0086], [0087], [0092]* ,

vi. A judgment step of obtaining the encryption key based on the identifier according to an instruction of a verifier who verifies a certificate

decrypting the obtained characteristic quantity of the display data, and judging whether or not the decrypted characteristic quantity obtained by decrypting the encrypted data and the characteristic quantity of the display data match and in those cases wherein a match is not judged to be present, issuing a warning that signature tampering may have occurred(*comparing the comparison hash value with the decrypted hash value; and determining the document has been altered when the new hash value and the decrypted hash value do not match*)(paragraph [0022], [0071], [0092]).

But does not explicitly disclose a plurality of display data certifier identification areas wherein display data certifier signature information is stored in a visually viewable, rewritable and erasable state or a plurality of certification data areas corresponding respectively to said certifier identification areas wherein certification data associated with each certifier is respectively stored in a visually viewable, rewritable and erasable state. However, Yankovich et al discloses self directed routable electronic form, which further discloses:

A plurality of display data certifier identification areas wherein display data certifier signature information is stored in a visually viewable, rewritable and erasable state(column 3, line 50 to column 4, line 10) ; and  
A plurality of certification data areas corresponding respectively to said certifier identification areas wherein certification data associated with each

certifier is respectively stored in a visually viewable, rewritable and erasable state(column 3, line 50 to column 4, line 10; Fig. 4, Fig. 9).

Therefore, it would have been obvious to one having ordinary skill in the art at the time modify the teaching Bentley et al such as to include a plurality of certification data area.. One would have been motivated do so in order to self directed electronic form that can guide the user to appropriate routine as discussed by Yankovich et al.

**Claim 2:** Yankosvich et al discloses an anti-tampering signature method for rewritable media according as in claim 1 above, while neither of them explicitly disclose wherein, in the extraction step, a general characteristic extracted from the image data generated by reading the display data is used as the characteristic quantity(*paragraph [0022]*).

### **Conclusion**

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fatoumata Traore whose telephone number is (571) 270-1685. The examiner can normally be reached Monday through Thursday from 7:00 a.m. to 4:00 p.m. and every other Friday from 7:30 a.m. to 3:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nassar G. Moazzami, can be reached on (571) 272 4195. The fax phone number for Formal or Official faxes to Technology Center 2100 is (571) 273-8300. Draft or Informal faxes, which will not be entered in the application, may be submitted directly to the examiner at (571) 270-2685.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group Receptionist whose telephone number is (571) 272-2100.

FT  
Thursday, May 22, 2008

/Nasser G Moazzami/

Supervisory Patent Examiner, Art Unit 2136

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